

## **AMENDMENTS TO THE CLAIMS**

The following listing of claims will replace all prior versions, and listings, of claims in the application:

### **Listing of Claims:**

- 1- 18. (Cancelled)
19. (New) A method for generating data that can be used to assess the cognitive or sensorimotor capabilities or capacities of a test person, wherein measuring samples, generated using an available procedure, that represent activities in the brain of a test person are registered during time frames synchronized with a sequence of test situations in which the test person can be placed, in that from the registered measuring samples relevant activity changes are traced and localized in the brain of the test person, in that from the relevant activity changes a variety of groups are formed, whereby each group is assigned to a different, predetermined brain region, in that a relationship is determined among the groups of relevant changes assigned to various brain regions, and in that data describing the relationships are prepared for assessment.
20. (New) The method according to claim 19, wherein the tracing and localization of relevant activity changes, the formation of groups and the drawing up of relationship data are carried out using the measuring samples registered in all the time frames, or per individual time frame, or per group of time frames.

21. (New) The method according to claim 19, wherein the time frames for registering measuring samples are synchronized with the succession of test situations in such a manner that a time frame begins with the start of each test situation of the sequence of test situations.
22. (New) The method according to claim 19, wherein each time frame has a length of between 0.1 and 3000 seconds.
23. (New) The method according to claim 19, wherein the test situations are problems presented visually or acoustically which are solvable using specific experiences.
24. (New) The method according to claim 19, wherein the test situations are images or other situations directed at a possible experience of the test person.
25. (New) The method according to claim 19, wherein the relevant activity changes are traced by means of filtering and/or a reliability test.
26. (New) The method according to claim 19, wherein for the formation of groups of relevant activity changes the brain region of the frontal, occipital and parietal lobes and the brain region of the temporal lobe, the hippocampus, and the limbic system are predetermined.

27. (New) The method according to claim 19, wherein in order to draw up the relationship data the relative number of relevant activity changes in the groups are determined.
28. (New) The method according to claim 19, wherein for the preparation for assessment the data describing the relationship, together with the experimentally drawn up areas for assessment, comparison data and/or threshold values are presented visually or acoustically.
29. (New) The method according to claim 19, wherein the measuring samples are collected by magnetoencephalography or electroencephalography and that the relevant activity changes are sources in the frequency range of 4 to 80 Hz with a goodness of fit of more than 90%.
30. (New) The method according to claim 29, wherein the measuring samples are recorded with a frequency of 10 to 5000 Hz.
31. (New) A data processing system for generating data that can be used to assess the cognitive or sensorimotor capabilities or capacities of a test person, wherein the system has an interface for the input of measuring samples collected by an available measuring technique that represent activities in the brain of the test person, as well as means with the aid of which the test person can be placed in a series of different test situations, means for the synchronization of the sequence of test situations with time frames in which measuring samples are

registered, means to trace and localize relevant activity changes from the registered measuring samples, means to form a variety of groups of relevant activity changes on the basis of the localities of the activity changes and on the basis of a variety of different, predetermined brain regions, means to calculate relationships among the groups of activity changes and means to prepare the data describing the relationship for assessment.

32. (New) The data processing system according to claim 31, wherein the system is a means for tracing and localizing relevant activity changes, a means for performing a filtering and/or a means for performing a reliability test.
33. (New) The data processing system according to either claim 31, wherein the system further comprises a display screen or a loudspeaker for the visual or acoustic presentation of the succession of test situations and/or for the preparation of the data reflecting the group relationships for assessment.
34. (New) A storage medium containing a program code which causes a computer into which the storage medium is introduced to carry out a procedure according to claim 19.
35. (New) Use of the method according to claim 19 for the assessment of test persons with regard to their ability to make use of their experience.
36. (New) Use of the method according to claim 19 as a lie detector.